

THE DER WEEKLY

www.eren.doe.gov/der

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In This Issue:

- Industry News
- DOE News
- Feature: King Mountain Wind Farm, Texas
- Regional Office News
- Environmental News
- Policy News
- By the Numbers
- Calendar of Events



Industry News

GE Power Systems Acquires Programma Electric
[Programma Electric](#), a provider of solutions for the maintenance and testing of primary and secondary equipment in transmission and distribution substations, has been acquired by [GE Power Systems](#). The entity, based in Sweden, will become part of GE Syprotec. *PowerMarketers.com*

Siemens' earthsafe™ System Installed in Los Angeles by GO Solar® Company

A San Fernando Valley home has received the first earthsafe™ solar energy system from [Siemens Solar Industries L.P.](#) The system was installed by [GO Solar® Company](#) last month. The solar panel arrays consist of 16 modules in groups of four, wired in series to produce 80 volts of DC power. It is estimated that the system will produce 5.5 kWhs per day, supplying more than one-third of the home's power usage. *PowerMarketers.com*

APPA Executive VP Advises Industry to Expand Use of DER

In a March 27 speech at the Engineering and Operations Conference in Myrtle Beach, South Carolina, David W. Penn, American Public Power Institute's Executive Vice President, urged the utility industry to expand its use of DER. He said the use of DER makes it possible to achieve reliable power supply with efficient load level and lower costs to consumers. *Public Power Weekly*, April 2, 2001

New York Power Authority Told to Stop Construction of Two New Plants

Several new power plants being built in New York city have met resistance from politicians, businesses, and community

groups. In the New York borough of Queens, the construction of two turbines has violated the environmental review laws according to New York Supreme Court Judge Joseph Golia. The New York Power Authority was constructing the plants on a fast track status to be online by June 1. In an attempt to augment peak and reserve energy for this summer, New York had planned to build eleven 44 MW turbines in seven locations. Six of the sites currently have lawsuits pending. The authority says it will continue construction until the judge issues a legal stop-work order.

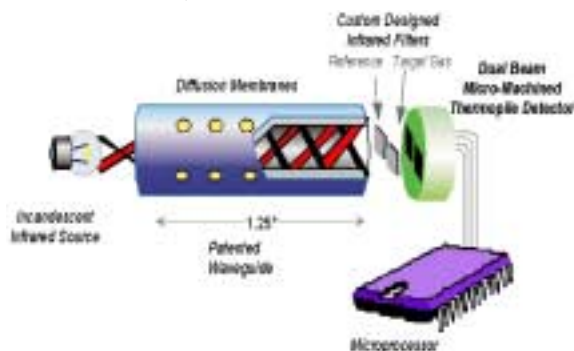
The Wall Street Journal, April 5, 2001



DOE News

Product Developed in Cooperation with ORNL to be Introduced into the Market

On April 2, Telaire, a division of Edwards Sensor Technologies in Goleta, California, announced that a new sensor technology for controlling the humidity level in buildings will be introduced into the market next week. The Telaire Vaporstat™ 9002 is a non-dispersive infrared (NDIR) sensor/controller, which was developed in cooperation with DOE's Thermally Activated Technologies (Desiccant) Program at Oak Ridge National Laboratory. It features accurate and affordable control of humidity previously only possible with instrumentation costing two or three times as much. The sensor/controller can provide precise control and understanding of interior humidity levels as they relate to conditions affecting critical manufacturing processes or indoor air quality (IAQ) in buildings. The Vaporstat™ design makes it possible to ensure that moisture levels never exceed crucial levels, which could result in preventing quality control problems or mold and microbial growth that adversely affect IAQ.



(Continued on page 2)

Setting your water-heater thermostat no higher than 120 degrees F will reduce annual CO₂ emissions by 500 lbs for each 10 degree adjustment.*

POWER CRUNCH...The DER Weekly Feature

Energy Forecast: Gusty Weather in West Texas Expected to Help Boost Electricity Generation

A new wind farm, King Mountain, is being constructed in west Texas. Upon completion, it will be one of the largest wind facilities in the world, with total capacity of 278.2 MW. [Bonus Energy A/S](#), a Danish wind turbine manufacturer, will provide 214 wind turbines for the project, each generating 1.3 MW of electricity. Developers expect the facility to be fully operational by the end of this year, providing power for more than 139,000 Texas homes. [Renewable Energy Systems Ltd.](#) and [Cielo Wind Power LLC](#) are developing the project, and Austin Energy, Texas New Mexico Power, and Reliant Energy will purchase the output, approximately 200 MW.

A survey of state incentives for wind energy, conducted by the American Wind Energy Association ([AWEA](#)), found that the minimum renewable energy requirements in Texas are the most effective of state renewables policies. According to AWEA, the trigger for the surge in wind farm construction in Texas is the state legislature's care in setting balanced measures in its Renewables Portfolio Standard (RPS). The RPS legislation sets the purchase obligation high enough to activate market growth, applies the requirements across the board to all electricity providers, bases proof of compliance on tradable renewable energy credits (ensuring flexibility and least-cost implementation of the requirement), and establishes penalties for non-compliance.



Other wind projects are underway in Texas (*DER Weekly*, March 2, 2001). It is expected that by the end of 2001 the state will have the capacity to generate approximately 800 MW of wind power.

Texas is rated as the second highest state in wind energy potential by Pacific Northwest Laboratory, with the potential to produce 1,190 billion kWhs per year of electricity. North Dakota is ranked first with the potential to produce 1,210 billion kWhs per year of electricity.

Sources: *Inventory of State Incentives for Wind Energy in the U.S., A State by State Survey*, American Wind Energy Association, March 12, 2001
AWEA News Release, March 21, 2001, EREN Network News, April 4, 2001
Cielo Wind Power, www.texaswind.com

Pioneering Thermal Energy Storage Work Re-discovered

Research funded by DOE under the Thermal Energy Storage program in the late 1980s is attracting renewed interest. According to analytical models developed by Pacific Northwest National Laboratory (PNNL), pre-cooling of air intake can boost the efficiency of gas turbines by about 10 to 20 percent. By using ice formed with cheap off peak electricity at night, generation can be increased significantly during peak demand periods, which often coincide with the hottest time of day. Recently, with peak energy at a desperate premium in many parts of the country, commercial companies have shown interest in licensing the software models from PNNL for application with 25 to 100 MW turbines.

Regional Office News

NREL the Focus of *Los Angeles Times* Article

The National Renewable Energy Laboratory was the focus of an April 1 *Los Angeles Times* article on alternative energy, which stated that the "lab's work has made renewable energy sources more attractive to and more widely accepted by prospective home builders." The story mentioned NREL's achievements in solar and wind power, attributing the lab's research to significant decreases in the costs of renewables technology over the last 20 years.

Los Angeles Times, Sunday, April 1, 2001

SRO Staff Presents to Annual Rural Electric Cooperative Management Meeting

Seattle Regional Office Staff presented to more than 150 Rural Electric Cooperative Directors and Managers on April 4th in Pasco, Washington, at their annual meeting. The presentation highlighted The Office of Energy Efficiency and Renewable Energy's Wind, Geothermal and Solar related opportunities for electric cooperative utilities in the region.

(Continued on page 3)



Environmental News

Reforestation of Lands in Montana for Carbon Sequestration

The Flathead Indian Reservation, tribal lands of the Confederated Salish and Kootenai Tribes, will be reforested through the purchase of emissions reduction offsets by the London office of Sustainable Forestry Management. This land in Sanders County, Montana, was burned by forest fires in 1994, and reforestation of the land will keep 47,972 tons of CO₂ equivalent out of the atmosphere during the first 80 years of the agreement. The initial reforestation will be funded by Sustainable Forestry Management, Environmental Financial Products has arranged the international transaction, and Montana Carbon Offset Coalition (MCOC) facilitated the trade. MCOC is working on a project to create a market for carbon credits, which would allow clients to purchase carbon credits from Montana landowners and communities.

[Environmental Network News](#), April 4, 2001



Sanders County, Montana

Three Pacific Northwest Companies Commit to 100% New Renewable Energy

Xantrex Technology, Inc., Batdorf & Bronson Coffee Roasters of Olympia, and Global Energy Concepts of Kirkland have purchased Green Tags from the Bonneville Environmental Foundation in an amount equal to 100 percent of their energy use. These purchases will result in 899 fewer tons of CO₂ being emitted into the atmosphere annually. [Yahoo! News](#), April 4, 2001



Policy News

North Dakota Enacts Three Wind Tax Credit Laws

Last week [North Dakota](#) Governor John Hoeven signed three bills enacting legislation to provide tax credits for wind energy generation facilities in the state. HB 1221 makes the construction costs of wind generation facilities with capacities of at least 100 kW exempt from state sales tax (construction must start before 2011). HB 1222 allows wind energy facilities to receive a 70 percent reduction in property taxes (for facilities built before 2011). HB 1223 provides income tax credits for people leasing property used for wind, geothermal, or solar energy devices. [Tax News Update](#), Center for a Sustainable Economy, April 3, 2001



By the Numbers

- 70 percent increase in orders of GE's smaller gas turbines during 2000, amounting to \$2.5 billion
- 17 percent of GE's \$15 billion power systems revenues attributed to distributed power for the year 2000

GE Annual Report 2000

Fuel Cells and Other Renewables May Become Tax Exempt in Washington State

The [Washington Legislature](#) is considering a bill that would extend existing sales and use tax exemptions for renewables to include fuel cells and smaller generating facilities. The bill, HB 1859, would lower the generation capacity requirement from 200 kW to 200 watts, and would expand the eligibility to include electricity generated for onsite use. The legislation has already passed the House and is being considered by the Senate. [Tax News Update](#), Center for a Sustainable Economy, April 3, 2001.

Fuel Cell Tax Credit Bill Being Considered

On March 28, Congresswoman Nancy Johnson (R-CT) along with 25 cosponsors, introduced a bill (H.R. 1275) to allow a tax credit for fuel cells. The credit would apply to fuel cells placed in service after December 21, 2001, and would last five years. Senator Joseph Lieberman (D-CT) has stated that he will introduce a companion bill in the Senate this month. <http://thomas.loc.gov>

Comprehensive DER Legislation Introduced in U.S. House of Representatives

The Energy Self-Sufficiency Act for the 21st Century (H.R. 1045) was introduced last month by Congresswoman Heather Wilson (R-NM). The bill focuses on DER, stating that the U.S. is "poised to be a world leader in the design and manufacture of [DER] technology," that there is a "lack of consistent policies and procedures for the interconnection of [DER] to the local electric grid," and that the "Federal Government needs a more coordinated program for research, development and demonstration of [DER]." Among other items, the legislation addresses interconnection issues, tax incentives, and R&D of new DER technologies including thermally activated technologies, microturbines, fuel cells, CHP, advanced internal combustion engine generators, advanced natural gas turbines, energy storage devices, and ancillary equipment for dispatch and control. The bill would appropriate \$236 million for each fiscal year 2002 through 2007.

<http://thomas.loc.gov>

(Continued on page 4)

*Replacing standard light bulbs with energy efficient compact fluorescent ones will reduce annual CO₂ emissions by about 500 lbs. per bulb.**



CALENDAR OF EVENTS

Date	Event	Location	Other Information
APRIL 2001			
9	Indian Renewable Energy Program Workshop, "On-Site Electric Generation and Energy Efficiency..."	Albuquerque, NM	The Heritage Institute, National Indian Gaming Association, U.S. DOE, Stephen Sargent, DRO, 303-275-4820
11	Urban Consortium Workshop	Golden, CO	Joseph.galdo@ee.doe.gov
12	IEEE Wenatchee Section and DOE: Fuel Cell Technology Forum	Wenatchee, WA	Matthew Davis; matthew.davis@ieee.org
12	Brown Bag Lunch Seminar: Renewable Energy and CA Power Crisis	Washington, DC	www.nrel.gov/events.html ; Wanda_Addison@nrel.gov
12-13	NREL Congressional Tour	Golden, CO	Vernellia.Johnson@ee.doe.gov
17	OPT Analysis Brownbag—Dr. Backus, Policy Assessment	Washington, DC	Tina Kaarsberg; tina.kaarsberg@ee.doe.gov
18-19	ORNL Congressional Tour	Oak Ridge, TN	Vernellia.Johnson@ee.doe.gov
19-20	Leveraging Combined Heat and Power Technologies	Denver, CO	steve_sargent@nrel.gov
21-25	Forum 2001 — Solar Energy: The Power to Choose	Washington, DC	www.solarenergyforum.org
23	Wind Energy for Northwest Public Power – Issues and Policies	Portland, OR	www.nwppa.org
23-25	Intertech's Fifth International Conference on Distributed Power	Washington, D.C.	Hugh Olmstead; olmstead@intertechusa.com ; 207-281-9606
24-25	Utility Wind Interest Group Annual Meeting	Portland, OR	www.uwig.org
30-May 5	Affordable Comfort Conference: Home Performance Strategies	Milwaukee, WI	www.affordablecomfort.org
30-May 1	Peak Load Management Alliance Conference	Washington, DC	Co-sponsored by AESP International eboardman@aesp.org , 561-432-8000
MAY 2001			
1-3	Industrial Energy Technology Conf.	Houston, TX	jim@esl.tamu.edu
9-10	Second Int'l CHP Symposium	Amsterdam, Netherlands	www.2ndCHPSymposium.com ; Bob Dixon invited to speak
7-9	The 21st Annual Utility Energy Forum	Tahoe City, CA	Gnelson181@aol.com
9-10	Energy Management Conference	San Diego, CA	Sponsored by FEMP; www.aeecenter.org
9-11	GasMart Power 2001	Tampa, FL	www.gasmart.com or (800) 427-5747
13-16	7th National Clean Cities Conference and Exposition	Philadelphia, PA	Clean Cities Hotline: 800-224-8437 www.ccities.doe.gov/conference.shtml
21-23	Third Annual ICEPAG Conference	Newport Beach, CA	www.parcon.uci.edu/colloquium
24-25	Together with the First United Nations and DOE (FE and EE)	Newport Beach, CA	www.parcon.uci.edu/colloquium
30-31	Fuel Cells Codes & Standards Summit V	College Park, MD	ronald.fiskum@ee.doe.gov

*American households create an average of 20,000 lbs. of CO₂ emissions per year.**



CALENDAR OF EVENTS

JUNE 2001

3-6	FEMP Energy 2001 Conference	Kansas City, MO	www.energy2001.ee.doe.gov
3-7	WindPower 2001 Conference	Washington, DC	www.awea.org ; laura_keelan@awea.org
4-6	Advanced Technology Program National Institute of Standards and Technology — National Meeting	Baltimore, MD	www.atp.nist.gov/nationalmeeting
4-7	ASME Turbo Expo-Land, Sea, and Air	New Orleans, LA	www.asme.org/igti ; Debbie Haught is organizing a microturbine panel
4-7	International Joint Power Generation Conference & Expo	New Orleans, LA	www.asme.org/conf/ijpgc01 ; Debbie Haught is presenting
11	Fuel Cell Transportation Technology Summit	San Jose, CA	Sandra Gadzia; gadzia@sae.org
11-13	International Symposium on Distributed Generation: Power System and Market Aspects	Stockholm, Sweden	www.ekc.kth.se/ees/workshop/DG.htm
18-20	APPA National Conference	Washington, DC	www.appanet.org

JULY 2001

10-12	Gas Storage Workshop	Kingston, Ontario	David Quinn; quinn-d@rmc.ca
16-19	2001 National Workshop on State Building Energy Codes	Burlington, VT	www.eren.doe.gov/buildings/codes_standards/ buildings/2001natl_workshop.html
24-27	ACEEE Summer Study	Tarrytown, NY	www.aceee.org ; Rebecca Lunetta 302-292-3966
31- Aug. 1	Green Power Conference	Portland, OR	Tina Kaarsberg; tina.kaarsberg@ee.doe.gov

AUGUST 2001

21-24	International Energy Program Evaluation Conference	Salt Lake City, UT	608-835-6880; marymcc@tds.net
29- Sep. 3	IEEC Integrated Energy Efficiency Congress	Cleveland, OH	Sponsored in part by FEMP; www.aeeecenter.org

OCTOBER 2001

24-26	World Energy Engineering Congress	Atlanta, GA	www.agcc.org
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